

Federal Oversight

VALUE ENGINEERING CHANGE PROPOSAL MISSOURI DEPARTMENT OF TRANSPORTATION

☐ Conceptual Proposal ☒ Final Proposal Date 06/06/2011

Contract ID 101217-401 Job No. J4I-1574, J4I-1679 & J4I-2155

County Jackson I-70 Original Bid Cost \$10,938,325.16

Contractor Superior Bowen Asphalt Company By Keith E. Davenport

Designed By _____ Phone 816-765-1313

VECP# 11-61 (to be completed by C.O.) VEC ~~✓~~ or PDVEC ~~✓~~

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages
See attached narrative.

2. Estimate of reduction in construction costs. ~~94,877.08~~ (See attached) 94,471.09 PP

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.
The proposed change should not have any effect on other department cost on maintenance and any other operations.

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

06/06/2011
(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

06/13/2011 There would be no change to the contract completion time.
(date) (effect)

6. Dates of any previous or concurrent submission of the same proposal.

06/06/2011
(date and/or dates)

Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments:

Upon review we recommend UBAWS on EB I-470 from log mile 7.69 to 9.00 and WB from 7.89 to 9.20. Lane 1 and the inside shoulder (both directions) will change from a 1.75 in. mill and fill to a 3/4 inch mill and UBAWS. Lane 2 (SP125C) and lane 3 (concrete) will be used in place as per original contract. The remaining sections (between Woods Chapel and Colbern) were omitted because the purpose of the mill and fill was to reconstruct the longitudinal joint between the median shoulder (4 ft. concrete) and lane 1 asphalt.

PalgR
Submitted By Resident Engineer

6-23-11
Date

Comments:

DUE TO THE REDUCTION IN AREA APPLICABLE TO THIS VE, THE TOTAL ANTICIPATED SAVINGS HAS REDUCED TO +/- 100%. THIS WOULD BE A 75/25 SPLIT.

☒ Approval
Recommended

☐ Rejection
Recommended

Carol Ann

Digitally signed by Jackie White
DN: cn=Jackie White, o=US, ou=Construction and Materials, ou=44CA, email=jaclyn.white@modot.mo.gov
Date: 2011.06.24 15:13:50 -05'00'

District Engineer

6/24/11
Date

Comments:

SEE ATTACHED CORRESPONDENCE

☒ Approval
Recommended

☐ Rejection
Recommended

Federal Highway Administration
Required for FHWA Full Oversight Projects

Date

Comments:

APPROVED PER DISTRICT RECOMMENDATION

☒ Approval

☐ Rejection

David D. Bryant

Digitally signed by Dennis Bryant
DN: cn=Dennis Bryant, o=MoDOT, ou=3H35, email=dennis.bryant@modot.mo.gov, c=US
Date: 2011.08.29 13:43:15 -05'00'

State Construction and Materials Engineer

Date

Distribution: Resident Engineer, Project Manager, District Construction & Materials Engineer, State Construction & Materials Engineer, FHWA Value Engineering Administrator - MoDOT, P. O. Box 270, Jefferson City, MO 65102

DISCUSSED BY PHONE WITH KEVIN IRVING WHO RELUCTANTLY
AGREED TO SUPPORT FINAL PROPOSAL DGB



Fw: VE, Superior Bowen, J411574,1679, 2155, Jackson Ct
Dennis G Bryant to: kevin.irving

06/27/2011 07:35 AM

Kevin,

I'll call later this morning to discuss. This proposal has been through several iterations and I think we finally have something we can embrace.

----- Forwarded by Dennis G Bryant/SC/MODOT on 06/27/2011 07:32 AM -----

From: Perry J Allen/D4/MODOT
To: Dennis G Bryant/SC/MODOT@MODOT
Cc: Paul J Russ/D4/MODOT@MODOT
Date: 06/24/2011 03:37 PM
Subject: VE, Superior Bowen, J411574,1679, 2155, Jackson Ct

Dennis

Attached is the revised concept proposal for the Superior Bowen UBAWS VE we have been discussing.

Their proposal is not viable for the I-435 and I-70 portion of this combination project but has some value on the I-470 portion.

Basically, there is only two locations that the VE applies. The section of EB 470 from log mile 7.69 to 9.00 and WB 470 from log mile 7.89 to 9.20. Those sections are originally designed to be a 14 foot wide 1.75" mill and fill with SP 125B SM. Based on the proposal, they would be constructed 16' wide 0.75 " mill and fill with UBAWS Type C. This is the inside lane and shoulder along both locations. Due to the daylighting of the UBAWS across the entire 4' shoulder width, it should drain adequately.

Now for the numbers:

EB & WB would be @ 16' wide an area 24,593.1 SY.

ADD:

UBAWS @ 3.10 per SY = \$76,238.61

Remove: 14' wide mill and fill = 21,519 SY

SP124B SM @ 1.75" = 2043 tons @ \$83.56 per ton = \$170,709.70

Net savings of \$94,471.09.

As we discussed, using UBAWS in lieu of the SP125B SM mix would be more consistent with the adjacent 2 year old SP125C placed during the Blue Parkway project.

If you have any questions, please let me know.

Please discuss with Kevin Irving for concurrence and approval.

Thanks

Rte's 70, 470 & 435 – VE Narrative

Rte 470, J4I-1679

The existing requirements of the plans from log miles 7.69 to 9.00 EB, 10.02 to 12.16 EB, 4.71 to 6.96 WB and 7.89 to 9.20 WB calls for a 1.75" Mill and fill using of SP125B SM. Superior Bowen is proposing using a Type C UBAWS in lieu of SP125B SM in this portion of the project. We would still need to perform the milling to provide for the new pavement surface to match the existing pavement surface without an elevation differential, but the depth would be reduced to approximately 5/8". We believe the existing pavement is in a condition that would be acceptable to placing the UBAWS application and the revised pavement section would result in a substantial cost savings to the owner.

77 DAY

2363
1250
70/22

4406

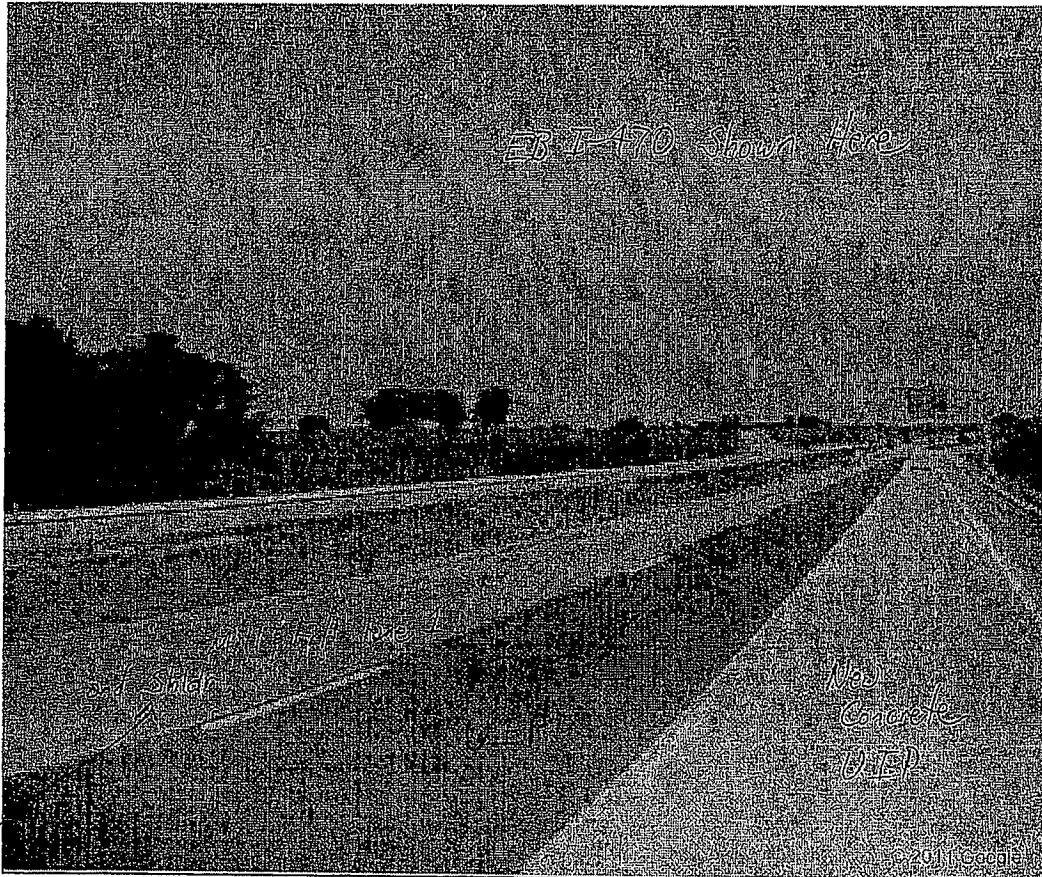
Google maps

Address Interstate 470
Address is approximate

6-23-11

Save trees. Go green!

Download Google Maps on your phone at google.com/gmm



Typical Section (both directions)

Savings = \$94,471.89
MODOT 75% = \$70,853.32
Contractor 25% = \$23,617.77

ADD

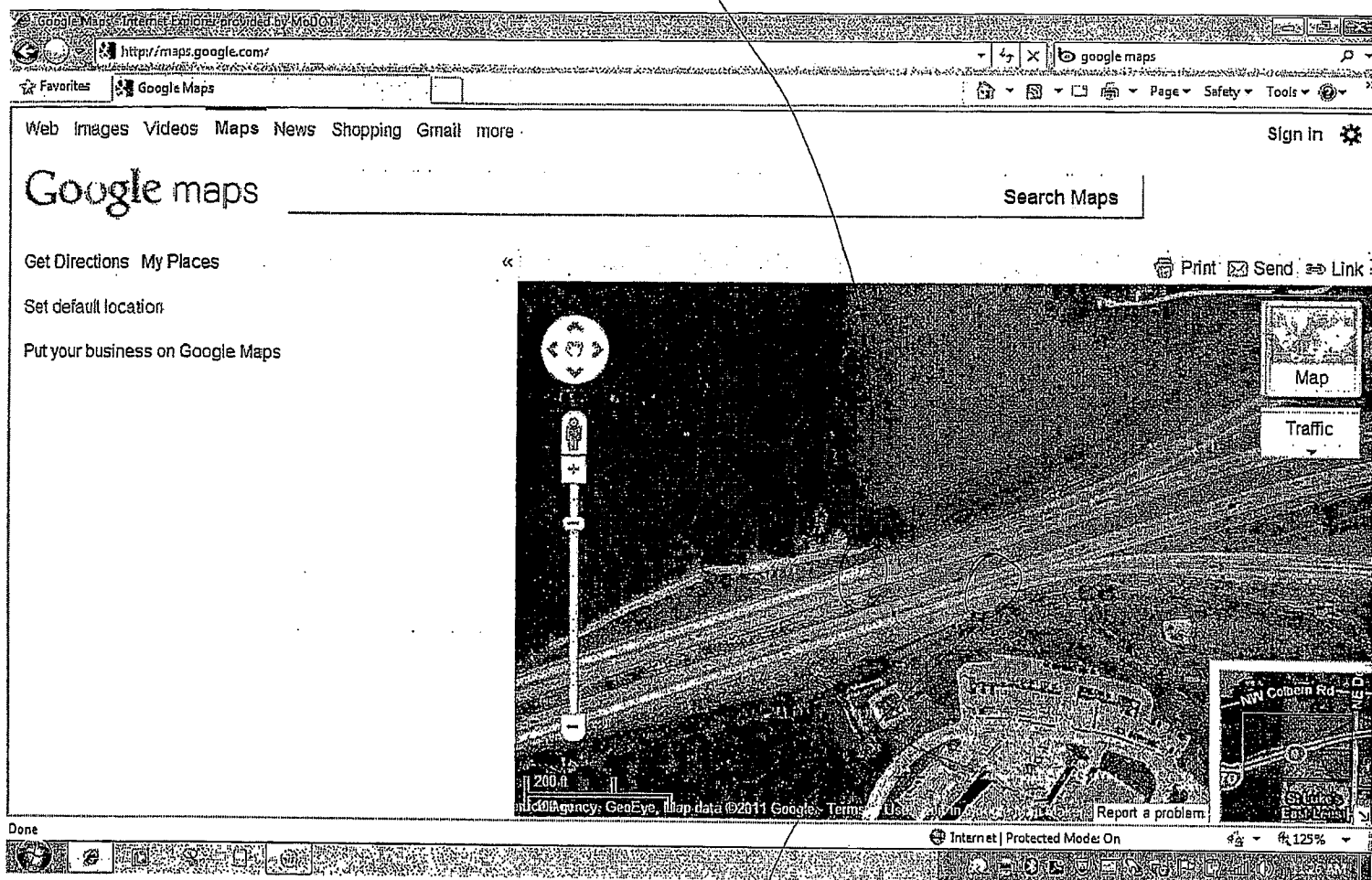
3/4" MILL & UBAWS FILL - 16' WIDE
1.31 MILES = 6,916.8 FT WESTBOUND/EASTBOUND = 13,833.6
MILL/UBAWS = $\frac{13,833.6 \times 16}{9} = 24,593.1 \text{ SY}$ $\times \$3.10 = \$76,238.61$

DELETE

1 3/4" MILL & SPI25B FILL - 14' WIDE
 $\frac{13,833.6 \times 14 \times 1.75}{12} = 1046.06 \text{ CY} \times 1.953 = 2042.96 \text{ TONS}$
27 = \$170,709.70

WB I-470
Begin Mill & Fill
Log mile 7.89

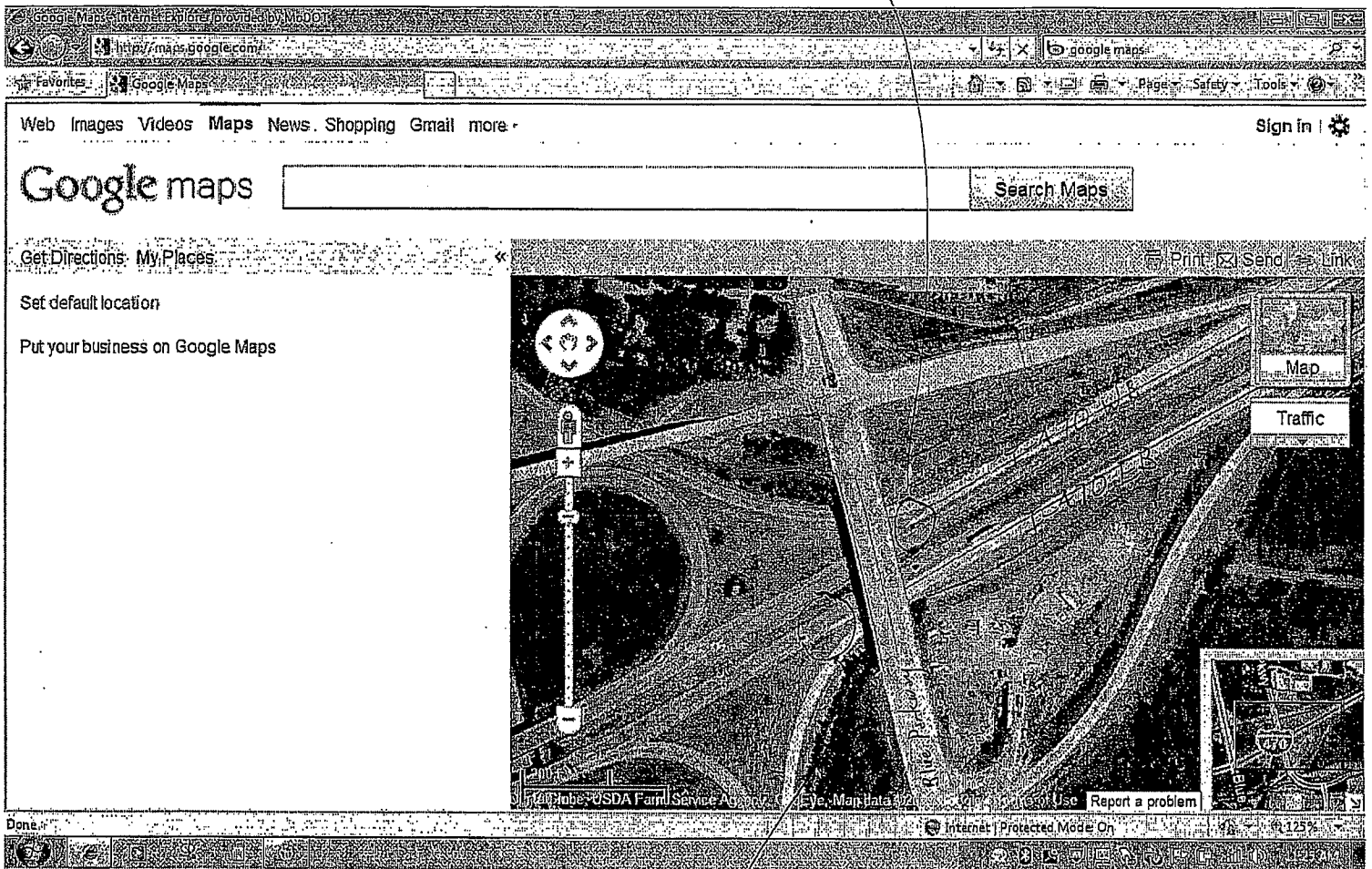
6-23-11



EB I-470 — end mill & fill
log mile 9.00

6-23-11

I-470 WB
end mill & fill log mile 9.20



I-470 EB
begin mill & fill
log mile 7.69

~1.4 mi scaled distance

$9.00 - 7.69 = 1.31 \text{ mi (cold mill)}$



SUPERIOR BOWEN ASPHALT COMPANY, L.L.C.

11030 Hickman Mills Drive • P.O. Box 9669 • Kansas City, Missouri 64134
(816) 765-1313 • Fax (816) 765-0945



June 6, 2011

Mr. Paul J. Russ, PE
Missouri Department of Transportation
600 NE Colbern Road
Lee's Summit, MO 64064-8002

Re: **Rte's 70, 470 & 435, Jackson**
J41-1574, J41-1679, & J41-2155
Contract ID: 101217-401
SBAC Job 11952_18

Dear Mr. Russ:

We are enclosing herewith our C-104 "**Value Engineering Change Proposal - Missouri Department of Transportation**" formally requesting approval of our VECP. The detailed narrative and break down of costs is attached to the C-104 form. The total savings in construction for our VECP is \$ 183,287.86. It is our opinion that additional design costs associated with our proposed VECP will be minimal if any.

Assuming there are no additional design costs, then in accordance with the Value Engineering Specification, we would share in the savings of our VECP with MoDOT. Besides the reduced construction costs an additional advantage is the impact to traffic due to construction operations would be reduced.

We would appreciate your review and consideration of our VECP. Please feel free to contact me to discuss our proposal, answer any questions or provide additional information.

If you have any questions or require any additional information, please feel free to contact me.

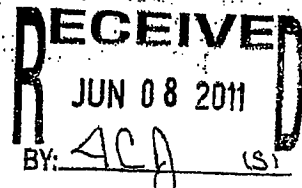
Sincerely,

SUPERIOR BOWEN ASPHALT COMPANY, LLC


Keith E. Davenport
Project Manager

KED:Job 11952_18

"An Equal Opportunity Employer"



VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- ☐ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's, ect.)
- ☐ TCP/MOT
- ☒ Paving (PCCP, ect.)
- ☐ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc. _____

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

_____ Use UBAWS in lieu of SP125 at specific locations on the project.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

_____ Scan entire document.
